

## PEER-REVIEW REPORT

**Name of journal:** *World Journal of Gastroenterology*

**Manuscript NO:** 71591

**Title:** Wumei pills attenuates 5-fluorouracil-induced intestinal mucositis through Toll-like receptor 4/myeloid differentiation factor 88/nuclear factor- $\kappa$ B pathway and microbiota regulation

**Provenance and peer review:** Unsolicited manuscript; Externally peer reviewed

**Peer-review model:** Single blind

**Reviewer's code:** 00039368

**Position:** Editorial Board

**Academic degree:** MD, PhD

**Professional title:** Academic Research, Associate Professor

**Reviewer's Country/Territory:** Estonia

**Author's Country/Territory:** China

**Manuscript submission date:** 2021-09-14

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2021-09-21 07:57

**Reviewer performed review:** 2021-09-22 11:51

**Review time:** 1 Day and 3 Hours

<b>Scientific quality</b>	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
<b>Language quality</b>	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
<b>Conclusion</b>	<input type="checkbox"/> Accept (High priority) <input checked="" type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection

<b>Re-review</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Peer-reviewer statements</b>	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

### SPECIFIC COMMENTS TO AUTHORS

This is a well-designed, performed and written animal experimental study for the evaluation of possible role of Wumei Pills, as traditional Chinese medicine, on attenuation of intestinal mucositis induced by 5-fluoracil via TLR4/MyD88/NF- $\kappa$ B pathway and regulation of microbiota. The authors aimed to study the possible mechanism of effect of Wumei Pills on inflammation, intestinal mucosal barrier, and intestinal microbiota in mice model of chemotherapy-induced intestinal mucositis (CIM). The authors found that Wumei pills can activate the NF- $\kappa$ B pathway, inhibit the expression of TLR4/MyD88/NF- $\kappa$ B protein, which results in the down-regulation of inflammatory factors and increase the expression of tight junction proteins. Important results are that Wumei Pills could regulate the intestinal microflora and increase the content of short-chain fatty acids. This experimental study is important in point of view of possible further clinical studies. After revision I am satisfied with corrections needed to be complete, however in paragraph concerning "Alcian blue staining analysis" is still written that "The paraffin sections were dewaxed with water" which is incorrect!